REMARKS

Claims 1, 13-15, 17, 19-21, 24-27 and 34-39 are currently pending in the subject application and are presently under consideration. Claims 1, 14, 21, and 27 have been currently amended as while new claims 40, 41 and 42 have been added as shown on pages 2-5 of the Reply. Support for these amendments can be found in the specification as filed at page 12 paragraph 37, page 17 paragraph 45, and page 22 paragraph 52. Applicants' representative thanks the Examiner for the teleconference of April 30, 2008 wherein merits of the claims were discussed.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I.a   **Rejection of Claims 1-13, 27-34 and 36-39 Under 35 U.S.C. §103(a)**

Claims 1 -13 and 27-34, 36-39 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hawkins, *et al.* (U.S. 6,493,464) in view of Forcier (U.S. 6,499,043). Withdrawal of this rejection is requested for at least the following reasons. The cited documents, alone or in combination, do not teach or suggest all aspects recited in the subject claims.

The claimed subject matter generally relates to managing, implementing and interpreting handwritten shorthand entries in a computer system. A user associates a short hand entry with one or more of a word expansion, a function that returns an output based on an input value or a program. Based on the context in which the shorthand entry is made, the computer interprets it to represent one or more of the aforementioned entities and carries out an appropriate action. To this end, independent claims 1, and 27 recite similar features namely: *receiving user input identifying a symbol as a shorthand entry for a text expansion, a program and a function that takes an input and produces an output based at least on the input; ….depending upon the outcome of the choosing step carrying out one or more of tasks selected from a group comprising: displaying the text expansion or launching the program or producing the output of the function with the symbol as the input.* Neither Hawkins, *et al.* nor Forcier teach or suggest such claimed aspects.

Hawkins, *et al.* relates to a pen-based computer text input system capable of interpreting a special pre-defined set of single stroke glyphs. The strokes a classified into three categories

namely: precharacter modifier strokes that inform the computer system that a subsequently entered stroke is to be modified by the pre-character modifier stroke in a predefined manner, character strokes that cause a character to be display and post character modifier strokes that effect a modification of a previously entered character in a predefined manner. In accordance with Hawkins, *et al.* a user-maintained glossary could be build wherein the user could define sequences of characters – or symbols, text, or program functions to be associated with a stroke, a multi-stroke combination or sequence of multiple stroke combinations. However, Hawkins, *et al.* does not teach or suggest associated a single stroke/multi-stroke combination with a plurality of entities such as a word expansion, an output generating function and a program simultaneously and a process of discerning a user intent and executing appropriate action based on a context of entry of the stroke/multi-stroke combination.

Forcier does not make up for this aforementioned deficiency of Hawkins, *et al.* In particular, Forcier relates to implementing input, editing and other manipulation of glyphs including handwritten script, ASCII test, bit-mapped images and drawings in a common document, using a compatible internal representation of the data and a simple, consistent set of user control functions. These functions are invoked using an intuitive and interactive set of user gestures which do not distract the user from the task of inputting or editing the document. A two-step gesture method avoids confusion between strokes and command gestures and allows use of similar gestures for different functions within the same and different contexts (*See* Forcier Abstract). From the aforementioned it is clear that the functions referred to in Forcier relate to tasks executed on the computer system based on perceived user gestures – however nowhere does Forcier specify that these are functions that receive a symbol as input and generate an output as recited in the subject claims. Moreover, Forcier also fails to teach or suggest associating a shorthand entry with a plurality of entities such as a text expansion, an output generating function and a program and implementing an appropriate action associated with one or more of the entities based on a context in which the shorthand entry is made.

In contrast, the claimed subject matter facilitates associating a symbol as a shorthand entry for a text expansion, a program and a output generating function and based on a context in which the shorthand entry is received executing tasks associated with one or more of these entities. For example, a single shorthand entry such as "kbd" may be associated with both an expanded text and with a function or with different expansions based on a context. Thus, if

"kbd" is written in the context of a word processing program a text expansion like "keyboard" may appear whereas when "kbd" is written in the context of an operating system shell a program may be launched (*See* applicants' specification as filed paragraph 45, and paragraph 52). As another example, a shorthand entry "dt" may be associated with the word expansion "date" or a function the outputs current date (*See* applicants' specification as filed paragraph 36). Executing such varied tasks based on a context of entry is not taught or suggested by either of the cited documents. On page 4 of the Office Action dated February 25, 2008, it is erroneously contended that Hawkins, *et al.* teaches displaying expanded text, implementing a function or launching a program dependent on the symbol. However, the system as taught by Hawkins, *et al.* is not capable of using the same symbol for different associations and implementing an appropriate associated task based on a determined context. This is because the contexts recited by Hawkins, *et al.* relate to assigning contexts to the term "character" to mean symbols, texts or program functions but do not teach detecting if such symbols are entered in a context of word processing program or operating system shell etc. (*See* Hawkins, *et al.* col.12 lines 58-62).

In view of at least the aforementioned, it is clear that the cited documents alone or in combination, neither teach nor suggest all aspects of the subject claims. Hence, this rejection should be withdrawn with respect to independent claims 1, 27 as well as all claims that depend there from.

I.b   Rejection of Claims 14-26, 35 Under 35 U.S.C. §103(a)

Claims 14-26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hawkins, *et al.* (US 6,493,464) in view of Forcier (US 6,499,043). Withdrawal of this rejection is requested for at least the following reasons. The cited documents, alone or in combination, do not teach or suggest all aspects recited in the subject claims.

The claimed subject matter generally relates to associating a shorthand entry with an expanded text and a program and executing an associated function based on whether a handwritten user input includes just the short hand entry or other additional material. To this end, independent claim 14 recites: ***receiving a handwritten user input including at least a first handwritten user input, the first handwritten input being at least a shorthand entry associated with both expanded text and a program ....choosing between either the expanded text or the program depending upon whether the handwritten user input***

includes the second handwritten user input. Hawkins, *et al.* or Forcier, either alone or in combination, do not teach or suggest such claimed aspects.

As described *supra*, Hawkins, *et al.* relates to a pen-based computer text input system capable of interpreting a special pre-defined set of single stroke glyphs which are classified into three categories. However, it fails to teach or suggest choosing one of the two options based on whether a handwritten user input includes a second hand written user input. On page 6 of the Office Action dated February 25, 2008, it is erroneously contended that Forcier teaches the step of choosing between two options based on a determination whether a handwritten user input includes a first and a second handwritten user input. At the cited portion, Forcier discloses a two part gesture wherein the first part initiates gesture control and *the second part is the gesture itself*. Thus, the processor allows the user to perform a pen action within a document to indicate that *a control gesture is going to be made that should not be interpreted as an additional text/drawing stroke*. The pen action stimulates feedback by causing display of a gesture prompt. Therefore, contrary to the assertion in the Office Action that Forcier discloses a first and second *handwritten input,* Forcier discloses a first handwritten input followed by a gesture that is not a handwritten input as it specifically teaches that the second gesture should not be interpreted as a text/drawing stroke. (*See* Forcier col.13 lines 35 – 44).

In contrast, the claimed subject matter relates to associating a first handwritten input with both a text expansion and a program and selectively invoking an action associated with either of the text expansion or the program based on whether a handwritten user input includes only the first handwritten user input or the first and a second handwritten user input. For example, if a shorthand entry is associated with both expanded text and a program then either or both may be implemented dependent upon the context in which the handwritten user input containing the shorthand is written. If the handwritten user input is the sole handwritten user input, then the program may be launched. If, on the other hand, the handwritten user input is not the sole handwritten user input, then the expanded text may alternatively be inserted and the program not launched. (*See* applicants' specification as filed paragraph 52).

In view of at least the aforementioned, it is clear that the cited documents, alone or in combination, fail to teach or suggest all aspects recited in independent claim 14. Hence, this rejection should be withdrawn with respect to this independent claim, as well as all claims that depend there from.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP2296US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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